

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C12R1/19 A61K35/74 C12N1/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 C12R A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99/26642 A (PROPERT HANS ; PHARMA ZENTRALE GMBH (DE)) 3 June 1999 (1999-06-03) the whole document	1-8
A	WO 98/44134 A (BLUM OEHLER GABRIELLE ; SONNENBORN ULRICH (DE); PROPERT HANS (DE); HA) 8 October 1998 (1998-10-08) the whole document	1-8
A	WO 00/78925 A (LIFE TECHNOLOGIES INC) 28 December 2000 (2000-12-28) page 3, line 16 - page 5, line 19; examples 4-9	1-8

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

9 September 2004

Date of mailing of the international search report

04/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

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Mossier, B

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 686 184 A (PUEHLER ALFRED ET AL) 11 August 1987 (1987-08-11) abstract column 6, line 31 - line 47; example 4	1-8
A	BLUM ET AL: "Properties of Escherichia coli strains of serotype O6" PLASMID, NEW YORK, NY, US, vol. 23, no. 4, 1 July 1995 (1995-07-01), pages 234-236, XP002085750 ISSN: 0147-619X the whole document	1-8
A	KRUIS W ET AL: "Einsatz von Probiotika in der Humanmedizin" DIE MEDIZINISCHE WELT, XX, XX, 1996, pages 53-57, XP002097855 ISSN: 0025-8512	
A	CUKROWSKA B ET AL: "Specific proliferative and antibody responses of premature infants to intestinal colonization with nonpathogenic probiotic E. coli strain Nissle 1917." SCANDINAVIAN JOURNAL OF IMMUNOLOGY. FEB 2002, vol. 55, no. 2, February 2002 (2002-02), pages 204-209, XP002295421 ISSN: 0300-9475	
A	FIGUEIREDO P P ET AL: "Influence of oral inoculation with plasmid-free human Escherichia coli on the frequency of diarrhea during the first year of life in human newborns." JOURNAL OF PEDIATRIC GASTROENTEROLOGY AND NUTRITION. JUL 2001, vol. 33, no. 1, July 2001 (2001-07), pages 70-74, XP009036229 ISSN: 0277-2116	
A	DUVAL-IFLAH Y ET AL: "'Implantation of a strain of 'Escherichia coli' in the digestive tract of human new-borns: barrier effect against antibioresistant 'E. coli' (author's transl)!" ANNALES DE MICROBIOLOGIE. 1982 MAY-JUN, vol. 133, no. 3, May 1982 (1982-05), pages 393-408, XP009036261 ISSN: 0300-5410	
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>TOLKER-NIELSEN T ET AL: "A statistical analysis of the formation of plasmid-free cells in populations of Escherichia coli." JOURNAL OF BACTERIOLOGY. JUL 1994, vol. 176, no. 14, July 1994 (1994-07), pages 4306-4310, XP009009847 ISSN: 0021-9193</p> <p>-----</p>	

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